WE CLAIM:

- 1. A polymeric nanoparticle capable of entrapping a fluorescent dye or other substance.
- 2. A composition containing polymeric nanoparticles entrapping a fluorescent dye or other substance.
- 3. The composition of claim 2, wherein the nanoparticle is comprised of a biodegradable polymer.
- 4. The composition of claim 3, wherein the biodegradable polymer is selected from the group consisting of: PLGA, PLA, PVA, PGA, Chitosan, Albumin, and any combination thereof.
- 5. The composition of claims 2 or 3, wherein the nanoparticle is about 1 to 1000 nm in size.
- 6. The composition of claims 2 or 3, wherein the size of the nanoparticle is in the micrometer range.
- 7. The composition of claims 2 or 3, wherein the fluorescent dye is indocyanine green (ICG).
- 8. The composition of claim 2, further comprising a targeting molecule.
- 9. The composition of claim 8, wherein the targeting molecule is selected from the group consisting of: an antibody, a protein, a polypeptide, a polysaccharide, DNA, RNA, a chemical moiety, a nucleic acids, lipids, carbohydrates, and any combination thereof.

- 10. The composition of claim 2 further comprising a pharmaceutically acceptable vehicle.
- 11. A method of making polymeric nanoparticles that entrap a dye or other substance, said method comprising the steps of:
 - making a solution containing the carrier polymer and the dye;
 - b) dispersing the above solution into a second solution where the carrier polymer will form nanoparticles;
 - c) allowing a nanoparticle suspension to form wherein the nanoparticles entrap the dye;
 - d) separating the nanoparticles from the liquid phase by centrifuging or other methods.
- 12. A polymeric nanoparticle-dye complex made according to the method of claim 11.
- 13. A kit comprising the polymeric nanoparticle-dye complex of claim12.
- 14. A PLGA nanoparticle-ICG complex.
- 15. A contrast agent comprising a polymeric nanoparticle-near infrared dye complex.
- 16. The contrast agent of claim 15, wherein said agent is useful for identifying inhomogeneities within the scattering media of tissues.
- 17. The contrast agent of claim 16, wherein the inhomogeneities are tumors and melanine.
- 18. A method of stabilizing IR fluorescent dyes comprising entrapping the dye in a polymeric nanoparticle.

19. A method for treating cancer, comprising administering to a subject in need of treatment a composition comprising one or more polymeric nanoparticle- dye complexes in an amount effective to prevent, ameliorate, reduce, or eliminate cancer cells.